

Amended

Patent No. 6,032,300), which, in turn, is a continuation-in-part of U.S. Patent Application Serial No. 09/158,088 filed September 22, 1998 (now U.S. Patent No. 5,920,915). --

IN THE CLAIMS:

Clean Set of Claims

The following is a clean set of claims 1-35 with original claims 1-5, 7-15, 19-28, and 30-35 amended as set forth in the marked up version attached hereto.

1. (Amended) A breathable, bead/adhesive/void space padding material comprised of a plurality of adhesive coated, plastic beads having average diameters between about 1 and about 10 mm and of which at least 50 percent are at least 50 percent coated with an adhesive that is cured from a liquid state (wherein the adhesive is not in a melted state) while in initial contact with the beads, and wherein a cured form of said adhesive has a hardness ranging from about Shore A 20 to about Shore A 95 and is used in a quantity such that it represents between about 20 and about 80 weight percent of the padding material and thereby serving to create a system of void spaces that constitutes from about 10 to about 40 volume percent the total volume of said padding material.

2. (Amended) The padding material of claim 1 wherein the adhesive coated, plastic beads have average diameters between about 1 and about 6 mm.

3. (Amended) The padding material of claim 1 wherein said adhesive coated, plastic beads are inelastic.

4. (Amended) The padding material of claim 1 wherein said adhesive coated, plastic beads are elastic.

5. (Amended) The padding material of claim 1 wherein said adhesive coated, plastic beads are made of polymeric materials selected from the group consisting of polyethylene, propylene and ethyl propylene copolymer.

6. The padding material of claim 1 wherein said system of void spaces is substantially comprised of substantially regularly distributed void spaces.

7. (Amended) The padding material of claim 1 wherein the adhesive coated, plastic beads have diameters ranging from about 1 mm to about 3 mm.

8. (Amended) The padding material of claim 1 wherein said adhesive coated, plastic beads are solid.

~~11~~ ^{OK} 9. (Amended) The padding material of claim 1 wherein said adhesive coated, plastic beads are hollow.

~~11~~ ^{OK} 10. (Amended) The padding material of claim 1 wherein said adhesive coated, plastic beads are made of a ceramic material.

11. (Amended) The padding material of claim 1 wherein said adhesive coated, plastic beads are made from a resin material.

✓ 12. (Amended) The padding material of claim 1 wherein said adhesive coated, plastic beads are made of an expanded ethylene material.

~~11~~ 13. (Amended) The padding material of claim 1 wherein the adhesive coated, plastic beads have one or more holes passing through their bodies.

14. (Amended) The padding material of claim 1 wherein said adhesive coated, plastic beads are made of a thermosetting material.

15. (Amended) The padding material of claim 1 wherein said adhesive coated, plastic beads are made of a thermoplastic material.

16. The padding material of claim 1 wherein the adhesive is made from a two part resin.

17. The padding material of claim 1 wherein the adhesive is made from a thermosetting synthetic resin.

18. The padding material of claim 1 wherein the adhesive is made from a thermoplastic synthetic material.

19. (Amended) The padding material of claim 1 wherein said adhesive coated, plastic beads are of different sizes.

20. (Amended) The padding material of claim 1 wherein said adhesive coated, plastic beads are corona plasma treated.

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~~21.~~ 21. (Amended) The padding material of claim 1 wherein said adhesive coated, plastic beads are coated with a coupling agent to promote bead/adhesive bonding.

22. (Amended) The padding material of claim 1 wherein said adhesive coated, plastic beads are flame treated.

23. (Amended) The padding material of claim 1 wherein said adhesive coated, plastic beads are plasma jet treated.

24. (Amended) The padding material of claim 1 wherein said adhesive coated, plastic beads are spherical.

25. (Amended) The padding material of claim 1 wherein said adhesive coated, plastic beads are ellipsoid.

✓ 26. (Amended) The padding material of claim 1 wherein said adhesive coated, plastic beads are made of different plastic materials.

✓ 27. (Amended) The padding material of claim 1 wherein said material is placed in a cloth casing.

✓ 28. (Amended) The padding material of claim 1 wherein said material is placed in a net casing.

✓ 29. The padding material of claim 1 wherein said material is used in conjunction with a hard plastic, outer shell.

30. (Amended) The padding material of claim 1 wherein at least 50 percent of the adhesive coated, plastic beads are at least 80 percent covered by the adhesive.

31. (Amended) A breathable, bead/adhesive/void space padding material for sports equipment comprised of a plurality of adhesive coated, plastic beads having average diameters between about 1 and about 10 mm and of which at least 50 percent are at least 50 percent coated with an adhesive that is cured from a liquid state (wherein the adhesive is not in a melted state) while in initial contact with the beads, and wherein a cured form of said adhesive has a hardness ranging from about Shore A 20 to about Shore A 95 and is used in a quantity such that it represents between about 20 and about 80 weight percent of the padding material and thereby serving to create a system of void spaces that constitutes from about 10 to about 40 volume percent the total volume of said padding material.

32. (Amended) A breathable, bead/adhesive/void space padding material for medical equipment comprised of a plurality of adhesive coated, plastic beads having average diameters between about 1 and about 10 mm and of which at least 50 percent are at least 50 percent coated with an adhesive that is cured from a liquid state (wherein the adhesive is not in a melted state) while in initial contact with the beads, and wherein a cured form of said adhesive has a hardness ranging from about Shore A 20 to about Shore A 95 and is used in

a quantity such that it represents between about 20 and about 80 weight percent of the padding material and thereby serving to create a system of void space that constitutes from about 10 to about 40 volume percent the total volume of said padding material.

33. (Amended) A breathable, bead/adhesive/void space padding material for use in packaging other objects, said material being comprised of a plurality of adhesive coated, plastic beads having average diameters between about 1 and about 10 mm of which at least 50 percent are at least 50 percent coated with an adhesive that is cured from a liquid state (wherein the adhesive is not in a melted state) while in initial contact with the beads, and wherein a cured form of said adhesive has a hardness ranging from about Shore A 20 to about Shore A 95 and is used in a quantity such that it represents between about 20 and about 80 weight percent of the padding material and thereby serving to create a system of void spaces that constitutes from about 10 to about 40 volume percent the total volume of said padding material.

34. (Amended) A breathable, bead/adhesive/void space construction material comprised of a plurality of adhesive coated, plastic beads having average diameters between about 1 and about 10 mm and of which at least 50 percent are at least 50 percent coated with an adhesive that is cured from a liquid state (wherein the adhesive is not a melted state) while in initial contact with the beads, and wherein a cured form of said adhesive has a hardness ranging from about Shore A 20 to about Shore A 95 and is used in a quantity such that it represents between about 20 and about 80 weight percent of the padding material and thereby serving to create a system of void spaces that constitutes from about 10 to about 40 volume percent the total volume of said padding material.

35. (Amended) A breathable, bead/adhesive/void space filter material comprised of a plurality of adhesive coated, plastic beads having average diameters between about 1 and about 10 mm and of which at least 50 percent are at least 50 percent coated with an adhesive that is cured from a liquid state (wherein the adhesive is not in a melted state) while in initial contact with the beads, and wherein a cured form of said adhesive has a hardness ranging from about Shore A 20 to about Shore A 95 and is used in a quantity such that it